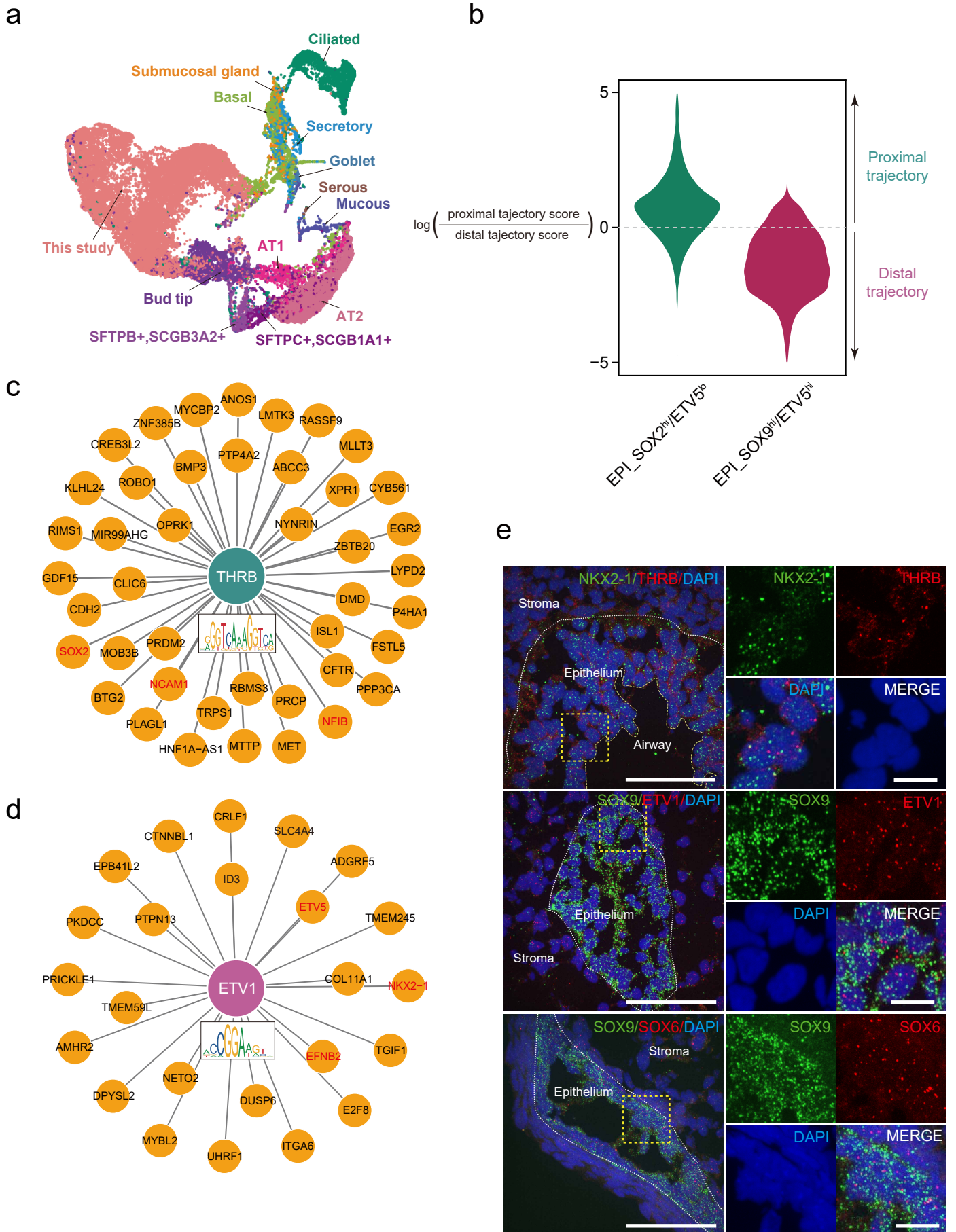


# Supplementary information, Fig. S3



### **Fig. S3 Development of human embryonic lung epithelium.**

**(a)** UMAP layout showing the annotation of lung epithelial cell types.

**(b)** The predicted proximal and distal cell fates of EPI\_SOX2<sup>hi</sup>/ETV5<sup>lo</sup> and EPI\_SOX9<sup>hi</sup>/ETV5<sup>hi</sup> epithelial cells based on more mature proximal and distal cell types from weeks 11.5 - 21 of published dataset<sup>9</sup>. The trajectory inference was performed using Waddington-OT (WOT) (see Materials and Methods).

**(c-d)** Network showing the SCENIC predicted target genes of *THRB* **(c)** and *ETV1* **(d)**. The genes marked in red are contributive to proximal epithelium reported in previous studies. The motifs listed in this study are validated from <https://jaspar.genereg.net>.

**(e)** smiFISH staining the expression of *THRB* (red) and *NKX2-1* (green) in proximal epithelium, the expression of *ETV1* (red)/*SOX6* (red) and *SOX9* (green) in distal epithelium in the lung at week 8. Data are representative of at least two independent smiFISH experiments. Scale bar: 50 μm (long), 10μm (short).